

Andrew A. Davis, Ph.D.

20520 87th Ave. SW

Vashon, WA 98070

Phone: (206) 218-7948

email: andrew@davisit.net

web: www.davisit.net

COMPUTER EXPERIENCE:

Owner, Davis Integrated Technologies, LLC, Vashon WA

Network and Systems Design and Administration:

Work with clients to research, design, implement and maintain data network and systems solutions for their businesses. Projects managed include: business network setup (LAN and WAN); site to site and remote access VPN implementation and management; VoIP and video over IP; multi-terabyte NAS storage solutions for Scientific Imaging; design of state of the art conference and presentation facilities; remote network and network service administration; website development, maintenance and hosting (static and content management system-database driven); eCommerce; IP security; and clustered server solutions for high availability and performance. Solutions using Windows Server 2003/8, Windows SBS 2003/8, Exchange 2003/7, Mac Server, Linux (Redhat Enterprise Server, CentOS and Fedora), FreeBSD, Solaris, Sharepoint Server, SQL Server, MySQL server, Cisco networking equipment (Routers, Switches and PIX/ASA). Training and management of office support and PC support staff. **(6/03 – Present)**

Computer Services Manager, SunGard Bi-Tech Inc., Vashon, WA

Network and system administration:

Established and maintained a variety of network services as well as development and ASP servers for an educational database software development company. Responsibilities included: Setup and system administration of Windows NT/2000/2003, Solaris, Linux, HP-UX and MPE/iX server systems. Setup and administration and performance analysis of Oracle and Informix databases. License management, acquisition and support of staff and training PC workstations. Design and Implementation of Remote Access, Virtual Private Networking, and WAN solutions for telecommuting, client support and multi-office connectivity. Setup and administration of Exchange/Outlook, and sendmail based email systems. Experienced with Avaya Definity phone systems, VoIP, QoS, Video over IP. Setup, support and maintenance of business LAN and internet connectivity. Training and management of PC support staff. Installation of database product along with Informix or Oracle database engines at client sites. On site technical training for product and database maintenance and use at client higher education institutions. **(1/00 to 6/03)**

Computer Consulting, Albany, NY and Seattle, WA

Specialized in tailoring computer systems to biological applications and measurements, bioinformatics, desktop publishing and production of computer graphical arts, web publishing (HTML), Windows NT/Macintosh network setup and management. Design and implementation of solutions for time-lapse video micrography and digital video imaging for microscopic data acquisition. Laboratory Information Management system design and setup **(8/89 to 1/00)**

Computer Lab Technician, Computer Center, Boston University School of Medicine

Part time position, assisted people with use of major PC and Macintosh graphics and desktop publishing applications. Established cross platform networking between pc and mac. **(9/88 to 6/89)**

Technical Expertise with a variety of computer software, hardware, operating systems and protocols including:

- TCP/IP
- VPN Software/Hardware (Windows L2TP, Cisco Isec)
- Cisco Routers / switches / PIX/ ASA
- DNS
- Email (Exchange and Sendmail)
- Web Servers (Apache, IIS)
- Network security
- Avaya Definity VoIP telephony
- RAID arrays (3ware)
- NAS
- Windows NT/2000/2003/2008 & SBS server
- Active Directory
- Windows 95/98 /Me/NT/W2K/XP/Vista/Windows 7 client
- Solaris (Sparc)
- Linux Server
- HP-UX (HP9000)
- X Windows
- MPE/iX (HP3000)
- Image
- Informix
- Oracle
- SQL Server
- Bioinformatics GCG/Genbank/NCBI
- LIMS
- Video and digital imaging
- Languages/Scripting-Visual Basic, HTML, PERL, Unix Shell

EDUCATION:

Albany Medical College:	Ph.D. Pharmacology and Neuroscience	(1995)
Albany Medical College:	M.S. Pharmacology and Neuroscience	(1994)
SUNY, Potsdam NY:	B.A. <i>cum laude</i> Biology	(1986)

HONORS, FELLOWSHIPS, AND AWARDS:

Peer Award for Outstanding Performance (**SBI award 2001**)
National Research Service Award, NEI. EGF receptor control of retinal cell fate.(**1996-1999**)
Dean's Certificate and Prize for Student Leadership.(**1993**)
President of the Graduate Student Organization of Albany Medical College.(**1992-1993**)
Vice President of the Graduate Student Organization of Albany Medical College.(**1991-1992**)
The Albany Medical Center Graduate School of Health Sciences Senior Research Tuition Scholarship.(**1991-1994**)

RESEARCH EXPERIENCE:

Research Consultant, Acucela, Seattle WA

Assisted in the establishment of a neural tissue culture system for the testing of novel factors. Designed and implemented terabyte storage and backup solution for automated digital micrography capture system for bioassays/image analysis. (**1/05 to 7/05**)

Research Consultant, Zymogenetics, Seattle WA.

Assisted in the establishment of a neural tissue culture system for the testing of novel factors. (**10/99 to 4/00**)

Postdoctoral Fellow, Dept. of Biological Structure, University of Washington School of Medicine, Seattle WA.

The goal of my postdoctoral research was to examine the molecular basis for cell fate decisions. My interest focused on the mechanism of action of the serine threonine kinase growth factor family and how they interact with specific transcription factors to control the processes of division and differentiation during retinal development. General skills: Writing, presentation at departmental seminars and national meetings, organization, multitasking, innovative problem solving, grant writing. Scientific Skills: Molecular Biological – In Situ Hybridization, Northern, Southern analysis, RTPCR and subcloning, sequencing, and bioinformatics (as an end user). Tissue Culture – expert in primary neural and secondary cell culture, immunocytochemical cell typing, fluorescence and confocal microscopy. (7/95 to 1/00)

Advisor: **Dr. Tom Reh**

Graduate Student, Dept. of Pharmacology and Neuroscience, Albany Medical College, Albany NY.

The goal of my doctoral research was to develop a single cell culture system for cells derived from the embryonic rat cerebral cortex. Using this system, I was able to assess the developmental potential of embryonic cortical progenitor cells while maintaining them in identical environments.

On finding that a subpopulation of these cells were multipotential and capable of extensive division, I subcloned individual sister cells illustrating that they also had the property of self renewal and could be categorized as stem cells. Scientific skills: Tissue culture - Development and use of single cell neural cell culture system and low, medium and high density assay systems for proliferation and differentiation of neural cells from the cortex, striatum, septum and hippocampus. (9/89 to 6/95)

Thesis: **Generation of Cell Diversity in the Rat Cerebral Cortex.**

Advisor: **Dr. Sally Temple**

Research Technician, Dept. of Anatomy, Boston University School of Medicine, Boston MA.

Experienced with neuroanatomical techniques; histochemistry, anterograde and retrograde track tracing with tritiated amino acids and HRP, autoradiography. Assisted with stereotactic surgery and electrophysiological mapping of receptive fields of area 17 and 18 neurons. Built computer systems for electrophysiological data acquisition and used Autocad for receptive field mapping. (9/87 to 6/89)

SELECTED PUBLICATIONS

Davis A.A., Matzuk M.M., Reh T.A. (2000) Activin A promotes progenitor differentiation into photoreceptors in rodent retina. **Mol Cell Neurosci.** 15, 11-21.

Qian X., Shen Q., Goderie S.K., He W., Capela A., **Davis A.A.**, Temple S. (2000) Timing of CNS cell generation: a programmed sequence of neuron and glial cell production from isolated murine cortical stem cells. **Neuron** 28, 69-80.

Quan, X., **Davis, A.A.**, Goderie, S.K., and Temple, S. (1997) FGF2 concentration regulates the generation of neurons and glia from multipotent cortical stem cells. **Neuron** 18, 1-20.

Davis, A.A., and Temple, S. (1994) A self-renewing multipotential stem cell in embryonic rat cerebral cortex. **Nature** 372, 263-266.

Temple, S. and **Davis, A.A.** (1994) Isolated rat cortical progenitor cells are maintained in division in vitro by membrane-associated factors. **Development**, 120, 999-1008.

References available on request.